

way, according to plans furnished by Mr. Papworth, architect.

In Dublin, the builders have had the best season for many years. House building is brisk, particularly about Rathmines and Rathgar. At Howth, also, improvements are going forward. Preparations are being made for the "Monster House" (between Richard Allen's and the Imperial Hotel) in Sackville-street. The front will be 82 feet long, and of an unusually ornamented description, although the sum specified for the entire building was only 4,500*l*. The builder is not yet declared.

ROYAL RECOGNITION OF THE ARTS AND PRACTICAL SCIENCE.

We hail with gratification the following paragraph in her Majesty's Speech from the Throne on the 11th, and shall look anxiously for the measure to which it alludes:—"The advancement of the Fine Arts and of Practical Science will be readily recognised by you as worthy of the attention of a great and enlightened nation. I have directed that a comprehensive scheme shall be laid before you, having in view the promotion of these objects, towards which I invite your aid and co-operation."

LEEDS ACADEMY OF ARTS.

This proposed Academy appears to be taking a shape, and the following gentlemen were elected Academicians, with power to add to their number: Messrs. Rhodes, Burras, Waller, Eastwood, Perkin, and Bromley, upon the condition of their presenting, in accordance with the rules of the Academy, "diploma works of art of sufficient merit to testify their ability to that honourable rank." The committee are working hard to enlist the public and to obtain for students in the provinces the means of becoming acquainted with works of art in their own locality. "It is true," says one of their number, Mr. Collinson, who has written a series of letters on the subject to the local papers, "that London, 'the chief city of the world,' will of necessity take the lead of every mere provincial district in collections of art; notwithstanding, however, that such be the case, it is certain that to deny to any but to metropolitan students the means of self-improvement, and opportunities of cultivating their taste by the examination of master-pieces of art as models and studies, is *per se* a piece of neglect suicidal to our progress in art as a great and thriving people. The way to encourage and foster it in the provinces generally is to have artists, and students of art, at home; and, as an initiatory step, to show those we have at present amongst us that we can appreciate the full value of their ennobling pursuits, and in attaining to comparative excellence, in which many of them—considering the difficulties they have had to surmount, and the few opportunities of improvement held out to them—have certainly evinced a devotion and an enthusiasm worthy of all praise and emulation. We cannot expect our population to have a taste for the beautiful even in design, unless we furnish them with specimens of the works of genius, and afford means and appliances of study in the higher, as well as rudimentary, principles of art. In this way the requirements of art will be properly met, not merely in presenting to the eye the actual

"Creations of the painter's, sculptor's skill;"

but, also, by giving the members of the Academy a ready access to books which are specially calculated to direct them how to proceed in their studies, and what to aim at; to imbue their minds with general lore and expanded sentiment; and thus, in the end, make them into scholars as well as artists, and thereby the better qualified to excel in the higher departments of the glorious profession for which their talents are peculiarly adapted, and a due appreciation of which is a sure test and ample guarantee of our claims either to individual or national refinement."

We cordially wish success to the endeavour. The council will of course avoid prebending to more than they can achieve in the first instance.

THE DESICCATION OF TIMBER.

At a recent meeting of the Liverpool Architectural Society, the secretary (Mr. Joseph Boulton) read a report from the committee on the desiccating process of Messrs. Davison and Symmington. The subject was brought under the notice of the society by Mr. Boulton in April 1851, when a committee was appointed, who have since had an opportunity of testing the efficacy of the process, at the saw-mills of Mr. Matthew Gregson, in Harrington-street. The report described the apparatus and the nature of the experiments which the committee were permitted to make, and they drew the following deductions:—"That the process of desiccation, patented by Messrs. Davison and Symmington, is of great practical value in reducing the time requisite for seasoning timber, and in accomplishing that result more perfectly than can be effected in any other way. That it is peculiarly applicable to the seasoning of flooring boards, and of the wood used in joiners' work. That to timber scantling it should be applied with considerable caution, at a moderate temperature, and for a comparatively lengthened period, in order that the scantlings may not be twisted or riven. That this process possesses the advantages of being available at all seasons of the year, and in all weathers, though of course care must be exercised, when removing the timber from the store to the building in which it is used, that it be not exposed to the wet, nor even to a damp atmosphere for any lengthened period. That the advantage of this process over the ordinary storing consists in the temperature never being so high as to scorch the wood, by which the strength of the fibres would be injured; and in the facility for removing the vapour as fast as it is expelled from the wood, in consequence of the air being propelled through the stove at any required velocity and temperature, from a gentle summer's breeze to a stifling simoom."

It appears from a statement made by the agent of the company, on the same occasion, that the system has been extensively adopted in the cotton, woollen, and flax manufactories, and its use is increasing on the continent. By its woods of all kinds, and in any degree of age, can be better seasoned in weeks, according to the agent, than by the best weather seasoning in years. As compared with furnace and steam storing, ordinarily employed, to desiccated woods, the very great superiority of this process is established, by its seasoning the wood quite as rapidly, but much more thoroughly, and, instead of wood being rendered brittle and weak, as it is by storing, this mode increases its strength and tenacity. The principle of this invention, viz. propelled currents of heated air, was said to be adapted to warming and ventilating buildings, whether modified by furnace or steam heat. In many cases the use of steam heat is preferable; and a model of an apparatus was exhibited to show how it might be applied to rooms or buildings of any capacity.

INDUSTRIAL INSTRUCTION ABROAD.

In the opening address for the session at the Museum of Economic Geology, Dr. Playfair gave an elaborate statement of the means of industrial instruction now afforded in various foreign states, with the view of showing the necessity for improved instruction in this country. The fact is, he said, every day more apparent, that mere muscular labour, in the present state of the world, is little better than raw material, and that both these are sinking in value as elements of production, while intellectual labour is wondrously rising. The whole of the industrial competition is now resolved into a struggle to obtain a maximum effect by a minimum expenditure of power. But this power is derived from natural forces and not from brute strength. Mental labour has engrafted itself upon muscular effort, and, in a healthy growth, has reduced the size and relative importance of the latter. Every new acquirement in the knowledge of natural forces is the acquisition of a new sense, which may be applied to production; and as every substitution of a natural force for muscular exertion

depends upon a knowledge of the former, it surely requires no laboured argument to prove that the economical application of it must rest upon a perception, and not merely upon empirical knowledge. Allusion to these considerations was necessary, because, owing to them, foreign countries established the system of industrial education.

In our own land, the rapid development given to production by our richness in natural resources raised at the same time a vast amount of experience, and art advanced before science. This experience was often produced by trial and error, and was attained by great expenditure of time and capital, but, when arrived at, afforded much help to production. Hence we see many manufacturers, and even engineers, in our own country, practising their arts by the aid of empirical experience only, little guided by scientific laws. Hence, also, has arisen an overweening respect for practice and a contempt for science, as if man could better use the powers of nature by stumbling against them in the dark rather than by reverentially seeking them in the open light of day. But the continental producers, being behind us in the race of competition, and having industries to create, preferred to profit by our empirical experience, and then pass us by their knowledge. Abroad, the scientific element of production is carefully nurtured, because the truth is there fully recognised, that nothing is so fertile in utilities as absolute abstractions; but it is known, also, to be essential to industry, that there should be a race of men who translate these abstractions into worldly utilities, and who can subvert nature, in language understood by her, to lend her powers to the fulfilment of practical ends. The creation of this class of men was a necessity of foreign competition. By taking hold of it, the continent has seized the growing element of production, while we are left in possession of the decreasing one.

The lecturer moved the wrath of some of his audience by the low view he took of his own country; and one ardent Englishman could scarcely be prevented from shouting—

"Hearts of oak are our ships,
Hearts of oak are our men
We have had them before,
And we'll lick them again."

It must be understood, however, that the Doctor refers mainly to the future, and none can doubt that with such an industrial army as our foreign neighbours are preparing, it is time that England gave her energetic and persevering sons the means of placing themselves on an equality in knowledge with their competitors.

RAILWAY MATTERS.

Our advocacy of reduced fares is now somewhat more likely than it has been to be rewarded with success. Mr. Constable, chairman of the Leeds Northern line, lately observed, at a general meeting of his constituents, that the passenger traffic during the last three weeks had averaged 1,200*l*. per week, being 400*l*. in excess of the receipts for passenger traffic for the corresponding period last year; and when they considered the low fares at which they had been obliged to work this traffic, they could not consider this anything but a satisfactory result. It was a proof how well-founded was the feeling which was developing itself, even amongst railway companies, that it is almost impossible to go too far in low fares for passenger traffic, where you have a sufficient population.—"The greater cheapness of railway travelling on the continent," says the *Scotsman*, "is remarked by all travellers. The keeping up of fares to the highest possible point has always been an object of effort on the part of our railway directors. Except in the case of excursion trains they have never given a trial to cheapness. Yet the very success of excursion trains might have afforded hints in this direction. There can be no doubt that hundreds who are driven by the tempting cheapness to take places in excursion trains would infinitely prefer having their own times, and company of their own choosing, even at a little extra ex-